The Requirements for Medical Practice.

7. 117

AN

INTRODUCTORY ADDRESS,

DELIVERED AT

SYDENHAM COLLEGE, BIRMINGHAM,

OCTOBER 4, 1852,

ON OCCASION OF THE OPENING OF THE WINTER SESSION,

BY

T. BELL E. FLETCHER, M.D. & B. L. PARIS,

FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS, AND OF THE ROYAL MEDICAL AND
CHIRURGICAL SOCIETY, AND
MEMBER OF THE ROYAL COLLEGE OF SURGEONS, LONDON,
PHYSICIAN TO THE GENERAL HOSPITAL, TO THE BLUE COAT CHARITY SCHOOL, TO THE GENERAL
INSTITUTION FOR THE BLIND, LATE SENIOR PHYSICIAN TO THE GENERAL DISPENSARY,
AND LECTURER ON THE PRINCIPLES AND PRACTICE OF MEDICINE TO
SYDENHAM COLLEGE, BIRMINGHAM, &c.

PUBLISHED BY REQUEST OF THE COUNCIL.

ROYAL COLLEGE OF SURGEONS OF ENGLAND

BIRMINGHAM:
PRINTED AT M. BILLING'S STEAM-PRESS OFFICES, 74, 75, & 76, NEWHALL STREET.

THE ADDRESS.

Gentlemen,

Feeling that any one of my colleagues would accomplish the task of addressing you upon this, the commencement of our Second Winter Session, in a better manner than myself: it is only at their urgent request that I have consented to undertake that duty; which gives me the honour of appearing before you to-day.

I know not their reasons for conferring this distinction upon me; it appears to me that their most valid, or only one, is the fact of my having the advantage (if such it can called) of most of them as to the number of years that have passed over my head; in accomplishments I am sure that most of them surpass me. I gladly avail myself, however, of the opportunity they have afforded me, of in some degree publicly acknowledging, and thanking them for the very great kindness, and courtesy, which I have on all occasions received at their hands.

As some changes have taken place in the staff of Lecturers of our School, since the last time we had the pleasure of meeting our Council and Friends at its opening, I think it may be well to commence my address by making reference to them.

It will always be a leading principle with us to enlist, amongst our numbers, those who are entitled to our respect, from the position they have gained for themselves in the profession, by their respectability, acquirements, and talents; as well as from their willingness to aid in the great cause of advancing the education of our juniors. On these grounds, two gentlemen, after due consideration of the propriety of the appointments, have been added; a third, who is also highly accomplished, and whom we believe to be in every way fully qualified to fulfil the important duties of the task assigned to him, replaces a gentleman who will be remembered by many of you from the very talented address delivered by him in this lecture room, twelve months ago. Whilst we regret the departure of Mr. Hayes from amongst us, I must on the part of my colleagues and myself observe, that he carries with him our best regards, and that we most cordially and unanimously wish him every success in the high career which he has selected, and in which his great and varied powers justly entitle him to anticipate an eminent position.

To the Council we offer our warmest thanks for the great assistance their influence has rendered to us, and with this assurance of our sense of their value, I will terminate these brief remarks, referring to the prospectus just issued as the bill of fare for our next Winter and Summer Sessions.

We now set to work then, with our boat, I hope I may say, well-trimmed and well-manned, and with a firm determination to perform our duties steadily, and thoroughly, so that we may conduct our young friends fully and faithfully through their preparation for the practice of their profession, that they may be enabled to gain for themselves that honourable distinction, which is open to all, who cultivate, and improve the natural abilities, with which God has endowed them, and who honestly pursue a steady course of duty, in all their actions, towards their Maker, their fellow-creatures, and themselves.

We have the means of most fully illustrating our different courses, and it is our intention to use them in that manner, which will yield the greatest benefit to our students. I can fully promise, both for my colleagues and myself, that nothing shall be wanting that is within our power to obtain, to make our lectures instructive, and impressive.

But I am afraid you will be wearied with promises, which savour somewhat of self-adulation; it must however be borne in mind, that the introductory address to a school, is to a lecturer, what the introduction to a book, is to an author—the only opportunity of which he can avail himself, to speak of himself and his colleagues; and as in this I have gone so far only as I have felt that my duty has impelled me, I hope I may be pardoned, even if I should have said more than you may think the occasion demands.

Having spoken of the qualifications of the Lecturers, and their willingness to undertake their several duties, and responsibilities, I must now for a short time request your attention, whilst I take this opportunity, of making a few observations, which are applicable only to the juniors of our profession; and I will first take upon myself to answer some remarks, which I know are not uncommonly heard amongst students, as to the non-necessity or uselessness of some of the subjects which the Examining Bodies require them to "get up." A term, by the bye, which I hope will be repudiated and banished by our School; for the very sound of it indicates something unsound. It shows that students get up replies to the questions which they think may be asked by their Examiners, as a parrot is taught to utter certain phrases to suit the will or whim of its owner, without knowing their signification; or that they get their subjects up for their examinations only, to let them down, and forget them, so soon as their trials are over, and they may *be licensed* to commence the practice of their profession—a period at which they will find that all the information they have attained, is much more required, than when they appear before the Examining Boards.

However much my young friends may be told by unsuccessful candidates for professional diplomas, that they have been treated unfairly, I am sure, upon close investigation, they will invariably find that the Examiners have been most kind, courteous, friendly, and considerate; most willing and anxious are they to look over failings, and to draw out information; and, remembering the time when they were in the situation of the candidate for the diploma, they are able, and most willing, to make every allowance for him, and practise it by showing consideration for that nervous trepidation, which may affect the well-organised mind, of the most diligent student, even when master of his subject; by kindness, attention, and an evident anxiety, to reassure him. This test of information, the examination for the diploma, is by many students very erroneously thought to be the great ordeal of their profession, which, once safely surmounted, displays a bright and smiling future, and all their fears being banished, they imagine that they have nothing more to do, than place their names upon their doors, and commence practice. But permit me for a moment to contrast the conduct of the Examiners in the Colleges, and Universities, with the conduct afterwards to be expected by them when engaged in the practice of the profession in the "wide, wide world," upon which they will then be launched. I am sure the seniors of our profession will tell us, that no consideration is to be found in the popular mind, for the failings of the medical practitioner; no anxiety for his character, or forbearance for his nervousness; little degree of courtesy, and no allowance or mitigation made for ignorance that may be displayed by him on any question. Suppose him to be surrounded by the anxious friends of a patient suffering from a dangerous illness: the medical attendant is expected to be forearmed, forewarned, and capable of combating every assailable point that may present itself in disease; and I do not say that this is unreasonable. At the same time he is surrounded, from the height to which education has generally attained in the present day, by those capable, and fully on the alert to detect him in error, and, as the journals daily give evidence, ready publicly to accuse and punish him for any fault. The medical practitioner, is expected by the public, to have a fair, and practical knowledge, of all that is taught in the Schools, and I am sure, that no intelligent practitioner in medicine will tell us, that there is anything useless taught by the Lecturers on Botany, Chemistry, and Physics; or Anatomy and Physiology; or on any of the subjects required in examinations for Medical Diplomas.

Many may be found, who do not possess a deep knowledge of these subjects, and who yet have succeeded in their practice, and in gaining public confidence; but I never yet knew an intelligent practitioner in medicine, who did not regret that his information was defective upon many of these subjects, or who did not admit that the more he knew of them, the more useful he found them in his every-day duties. Let us then hear no more of getting up subjects for examinations, but let us really study them for themselves, for their usefulness in practice, and in passing through life, instead of for answering catch-questions with smartness, and for passing examinations for diplomas.

It is always to be regretted, that we do not know enough: for, in the same degree that "knowledge is power," ignorance is weakness; and the more we know of what are termed the sciences collateral to medicine, the more shall we be able, to make ourselves useful, to our fellow-creatures, and the more resources shall we gain, by which we can parry the attacks of disease upon our patients. Medicine and Surgery, considered as we know them in practice, are not sciences—they are essentially *arts*—and the distinction, between an *art*, and a *science*, is nowhere more fully illustrated, than in the difference between any science—as that of Astronomy, or the science of Mathematics, or the science of Medicine—and the practice of Medicine, or the practice of Surgery. By the term *science*, we understand the knowledge of a subject, as the knowledge of Astronomy, the knowledge of Mathematics, or the knowledge of Medicine, the knowledge of Chemistry, the knowledge of Anatomy, the knowledge of Botany, the knowledge of Physics, &c.,—which are very different from the practice of Medicine, or the practice of Surgery. The practice of Medicine includes the knowledge of medicine, or the various effects of disease upon the different organs of the body, both physiologically and organically, or both as to the symptoms it produces during life, and the changes it effects, in the various organs of which the body is formed, during the progress of that disease, and the states in which they are found after death, or pathologically: thus the knowledge or science may be at once said to include the science of Physiology, or the knowledge of the functions of the organs, and the science of Pathology, or the knowledge of the changes effected in the organs of the body by disease. The *art* or *mystery* (as it used to be called) of Physic implies not only the possession of the requisite amount of knowledge, in the direct, and collateral medical sciences, but also the power, skill, and judgment, by which the practitioner can observe, weigh, and estimate the divergences from health produced by disease, under ordinary, and under peculiar circumstances, and in different temperaments, and can apply firmly, and confidently, the individual remedies required for restoring the deranged part to a healthy condition. Thus the knowledge constitutes the science—the practical application of various knowledges or sciences in the treatment of disease, the art—of medicine.

But to attain this art practically, we are obliged to call to our aid all the means in our power to find out disease, and we must bring numerous sciences to assist us in our object. After having examined our patient as to the nature of the altered functions, and the history of the disease, we are but enabled to make a guess at the seat of the malady; Hippocrates did as much as this; but Physics come in to our assistance, and enable us to localise, and accurately define, the seat of the disease. The laws of sound are drawn upon largely for assistance, and Chemistry, and the laws of light, become available, in testing the secretions, and in the use of the microscope. Grant these things, which I believe no well-educated man will dispute, and then I am sure you will unhesitatingly allow, that no examining body requires any information, extraneous to the subject of your study, or which is not requisite to ensure, or increase, your usefulness, in the practice of your profession.

The word *practice* reminds me, that I may still more firmly take up my position, in alluding to the numerous sciences which are brought to bear upon the treatment of disease. Will any one tell me that Botany is of no use, which informs us of the habits of plants, and in dividing them into families, indicates at the same time the general properties they contain? Is Chemistry of no use, which not only points out to us the substances of which our remedies are composed, but also the nature of poisons, which, by their existence in the body, produce diseases, such as gout and rheumatism, and suggests their antidotes—and when it also informs us of the changes in the atmosphere, to some extent, by which we are affected? Or will any man be found so inconsiderate, as to maintain that any science, which is required in the examinations for a medical diploma, is of no use, whilst we are obliged to avail ourselves of all and every information, to combat the various ailments, to which the human frame is heir.

There is no information so high that the physician should not avail himself of it, nor so low that it will debase him to use it, in the hope of benefiting his patient. By a careful consideration of the case, and by a sagacious application of rational remedies, very much may be done, either for promoting the recovery, or securing the comfort of the sufferer, in any disease.

As the wary and observant Indian tracks his way through the forest, and follows upon the trail of his enemy, by the cultivation of his powers of observation, by a knowledge of the habits of his foe, and by an uncomplaining and indomitable perseverance—so ought the physician to apply himself to the investigation and treatment of the various diseases of his patients; and he who from observation, thought, and patient acquisition knows most, will be able by the application of his knowledge, to accomplish his object, most speedily, and most efficiently.

The history of the great scientific advances which have been made in times past, the effects of which surround us, and constantly remind us of their presence, by the great usefulness of their magnificent results, informs us that the greatest aids, to our comfort, and enjoyment, have been produced by the persevering enquiries of philosophers, pursuing their subject from almost inconceivably small beginnings. In no time more than in the last thirty-seven years, during which we have enjoyed an almost uninterrupted intercourse with all the scientific men of Europe, owing to the peace secured to us by the splendid achievements of the great man who has just left us, has science enjoyed its sway. By its influence, we may truly say, mountains have been moved, lives have been prolonged, and time and space almost annihilated; and these great results are owing to the studies of nature's laws, abstracted from all apparent end, or useful application.

In looking into writings on the science of Electricity, we find that the first indication of that subtle fluid, which is now modelled by man into a language, and the message transmitted at his will, over mountains, and beneath the depth of the ocean, to any distance over the surface of the globe, was first indicated by an attraction for light bodies which amber acquired by friction; and it was by patient study of the properties of this fluid, abstracted from all useful application, and extended over years, that the extraordinary results were attained, by which we may now see, almost minute by minute, important messages conveyed from one end of Europe to the other.

The history of electricity shows us that the most brilliant minds have been engaged upon its study for years without intermission, being heartened on at long intervals only, by some slight increase of the knowledge of its properties.

I could produce hundreds of instances of a similar kind, if time or convenience permitted, to show the great fallacy of that always and ever present enquiry or objection, as to the value or "*cui bono*" of our studies, in any science; for it is the rule that all great results are produced from well-observed minor facts. What was the utility of analysing cinchona? (some would say): it cured fevers, and that was sufficient to know about it. To be sure, it disagreed with some stomachs. But from the apparently, at the time, useless investigation, its active principle, quina, was extracted, which cures fevers much more certainly, without disagreeing with any stomach.

To the study of Normal Anatomy, the surgeon owes everything. "This," said the late Dr. John Reid, in reference to the dissecting-room, in a letter to his father, "is the most important of all medical classes to the surgeon; for to pretend to cure the human body without an intimate knowledge of its different parts, is like fighting in the dark; you are as likely to fire upon your friends as your foes." And what the Anatomy of Form is to the Surgeon, the Anatomy of Structure is to the Physician. This study must be carried on with deep care, and attention; microscopic investigation must be diligently pursued, and in this, before any attempt is made to examine Pathological changes, a close and adequate study of Normal Structure must be made, as the introductory step. This is the only safe guide, and yet there are many who will cry out "*cui bono?*" to all this. But let me say, that if the Cell Theory of Schwann and Schleiden has shown us "*That there is one universal principle of development for the elementary parts of organisms, however different, and that this principle is the formation of cells,*" it requires only one short step to be made, by microscopical investigators, to give a glorious answer to the questioners as to the "*cui bono,*" namely, to establish the difference between the normal, and the anormal cell-growth, upon which most probably will quickly follow, the means of preventing the anormal growth, or, in other words, the prevention and cure of cancer, and all malignant cell-growths. This might appear ideal, but it was thought quite as much so to say, that a steam-vessel would cross the Atlantic, even within a comparatively short period. Who dare say now that the labours of our immortal Hunter were of no use? Who dare say at the present time that the labours of Sir Humphry Davy, or those of Jenner, were useless? And yet during the progress of the researches of these great men, to whose names we now refer with feelings of the greatest respect and gratitude, there were those who hesitated not to call them visionaries, whose speculations and experiments were destined to useless results.

It is the labours of our Philosophers I would wish you to emulate, and be assured there are none who have gone before you, even amongst those who have established for themselves, most brilliant names, in the pages of history, who had the advantages which you now possess, of living in an age in which so much has already been done, and in which education is duly esteemed and encouraged; and however great your labour, or however great your talents, they cannot be better directed than in investigating nature in its most intimate workings, and thereby acquiring a knowledge of the human frame, and its wonderful and intricate organisation, and of the "ills which flesh is heir to."

> "How complicate, how wonderful is man!
> How passing wonder He who made him such."

You cannot be better employed, whatever may be your situation, than in pursuing this interesting subject, which must inevitably raise your minds to that God who made us. And pray remember, that experience has pointed out to us that it is dangerous to lay aside any study in the wide field of natural science, or any fact, however isolated, as useless, or as not bearing upon the practice of medicine. Preliminary education, as a study of Latin and Greek, Mathematics, &c., and the general rudiments of a good and liberal education, are also by some thought to be extraneous matters; but these studies, besides their general usefulness in enabling us to trace for ourselves the onward progress of medicine, and surgery, from remote periods, and the grace and ornament which they throw around us in our social intercourse, are pre-eminently calculated to ensure, that state of mental discipline, which is highly necessary to secure success in acquiring a sound knowledge of the sciences bearing upon the practice of medicine. And, moreover, a good liberal education is also highly calculated to secure that bearing towards each other, which ought to characterise the actions of the members of the medical profession. It is by cultivating our faculties, and improving our understandings, that we may hope to be able to practise those virtues, which we find have been so much admired, in the enlightened medical practitioners, of all ages. Our conduct towards each other should be kind, generous, and unsuspecting; and as we profess to be members of a liberal profession, so we ought to show to the world that our mutual kindness, good-will, and courtesy, entitle our profession to their respect, and that we really deserve to occupy the position that we aim at. Let us ever act towards each other in the most straightforward and ingenuous manner; and, in our passage through life, let us be careful never, by any act, to create the slightest feeling of reserve, or distrust to us, in the minds of others, especially of our fellow-practitioners.

From the general style adopted in this address, it appears to me that it would be very incomplete, did I not allude to some higher duties of medical men, and to which their studies peculiarly direct their attention; and I advise my young medical brethren to accept with thanks the words of Paley, and to let their conduct be guided accordingly. "Upon the whole," he says, "after the schemes and struggles of a reluctant philosophy, the necessary resort is to a Deity. The marks of design are too strong to be gotten over. Design must have had a designer. That designer must have been a person. That person is God." And whilst I advocate strongly their practice of all social virtues, as strongly or more so do I wish to impress them with the necessity, both for their comfort in this world, and their happiness in Eternity, of the pure and unsophisticated practice of a natural and simple religion, of the heart. I would have them attach themselves to some religious congregation, and prove by their conduct, that in their profession there is no pretension, which I strongly advise them to avoid in every other relation in life, as well as in religion.

I would sum up, that it is our wish that our pupils should have a good preliminary education, by which may be secured to them, not only good general knowledge, but also well-disciplined minds, so that they may be the masters of their faculties, and not their faculties the masters of them; that they may set to work, and avail themselves of all the information relative to the sciences which are connected with medicine, not only because required for their examinations, but for their own improvement, and for their usefulness in bed-side practice; and that they shall conduct themselves kindly, and considerately, towards each other, and with devotion towards God. And, lastly, that they shall bear closely in mind, that an essential part of their duty towards Him, is to perform, in every respect, conscientiously, the duties of their position in life.

We are then (as I would wish to impress upon all who hear me), to consider our calling as one in which we have claims surrounding us on all sides; urgently pressing their requirements for mental culture, social feeling, and onward progress; but as in illustration of the increase of knowledge, I have drawn my examples from subjects extraneous to medicine; unless I stated my belief, that our profession has not been behindhand, in the great advance of knowledge, which has within the last half-century been made in the world, it might be assumed that I admitted a fact, very much to the disparagement of those who have been engaged in the practice of medicine, and that I was doing a very great injustice to many eminent and honourable practitioners, (medical philosophers), who have lived before us and in our time; indeed, were I to enumerate all that have lived within our memory, who deserve praise, or by whose writings we are continually receiving instruction, I should occupy too much of your time; I cannot, however, here let slip this opportunity of saying that, had I chosen to illustrate the position I have taken up from medicine, it could have been done equally well. What has not the ever to be honoured Laennec done for us by the introduction of the stethoscope, and the examination of our patients by physical means? He has given to us the power, in many instances, of accurately defining the nature, and seat, of diseases of the organs, contained within the chest, which previous to his time, was totally impossible, so that we are now able to discriminate diseases of the thorax, much more easily than we can diseases of the abdomen, thus reversing the degree of accuracy of our diagnostic means with regard to these two great cavities. He made a great step in advance in his time, and yet there were many who did not hesitate, for years after the stethoscope came into use, to inquire as to its "*cui bono.*" I sincerely hope there are none now. One objection to its use, I have frequently heard, is the difficulty of distinguishing the signs, and the want of means of practising its application. The answer I make is, that there is within the reach of every body the opportunity of auscultating the healthy chest; and that if any person makes himself acquainted with the healthy sounds produced by the actions of the heart and lungs, the discrimination of the unhealthy sounds comes as a matter of course; or, at least, it is most easily acquired, after knowing the healthy sounds produced by these organs.

With respect to the teaching of the practice of the profession, besides those lectures, the attention to which I have hitherto laid stress upon, there are, as you know, lectures upon Therapeutics, and the Theory and Practice of Surgery, and Physic, and to them I would anxiously, and strenuously request you to pay close attention. I do not mean to say that they will do away with the necessity for your reading medical works, or of attending to medical cases, but they will render your studies easier, and they will shorten your path to the attainment of medical knowledge. Their object will be to endeavour to impress you with fixed principles, and to show you some immoveable land-marks in disease, which will enable you to approach the bed-side of your patient with some degree of confidence. It will be my especial care to impress my pupils with the entire necessity of having good fixed principles, founded upon a correct knowledge of Anatomy, Physiology, and Pathology; which I think will do more to keep them from the influence of the delusions of the day, which have found dupes, (to speak charitably of them), amongst the members of our own profession. And with these fixed principles firmly impressed upon them, they will be prepared to obtain that information from bed-side practice, which experience only can give them, and from which the most experienced physician can never cease to derive advantage. The student of nature must not suppose that his education will at any time be completed. If any one should, by chance, be so vain as to suppose that he possesses sufficient information upon medical questions, and that he feels quite competent to form an opinion upon the nature and treatment of any disease, I would only wish him to walk into the wards of an hospital, and if he does not then soon find out his error, I think there must be very little hope for him.

With the part of medical education which comprehends the study of cases, or clinical instruction, it is scarcely possible for the student to begin too early; the more familiar he becomes with the various forms, in which disease presents itself, the better. He will follow out with more pleasure, the study of the collateral sciences, in proportion as he has the means of becoming able to see their application in the practice of medicine; and although, at first, almost every single case will involve him in perplexity, yet, by degrees, the mist will clear away, and in a much shorter time than he may at first anticipate, will the industrious and well-educated student be able to make something out relative to the nature and extent of disease. My own experience leads me to say, that the early practical association with disease, which I am now advocating for the medical student, is very effectively carried out by apprenticeships to hospitals, or to medical gentlemen who have extensive practices, and will devote attention to the superintendence of the studies of their pupils. I am sure that much useful information is acquired by the pupil during his apprenticeship, which he will find no other means of obtaining.

In attending to Lectures, I advise my young friends to strive carefully to impress upon their minds the precepts laid down, and to make notes of particular facts; and those who can, with facility, would do well to write out the whole lecture. But in clinical studies, I advise them to do all this still more carefully. Attend to all information relative to the case under notice which you can obtain from your instructors; and also examine every case for yourselves, and make accurate notes, in order that you may be able to refresh your memories, relative to any particular points. When you get a case, for the first time, of any disease you may not have seen before, be sure study it closely, and refer to authors upon the subject of the malady which it may happen to be. Mark carefully the effects of remedies, and ascertain reasons for the line of treatment adopted by the medical attendant. Carefully note the symptoms and physical signs during life, and if death should take place, compare these with the state of the body found at the *post-mortem* examination; a rule which, even in private cases, I advise you never to neglect, if you can possibly carry it out.

The observation, of a short space of time, will show the diligent student that, under the most varying treatment, the same disease gets well, which must lead him to the suspicion, that there is some other agent than the physician at work. In the early part of my medical studies I attended an hospital to which three physicians were attached. One may be said to have used no treatment at all: the second treated his patients upon the most approved principles, and a third with the most heroic doses of medicine. The results of their practice were about the same. In accidents, the surgeon has little more to do than to place the patient in the most favourable position for the operation of nature to effect the cure. If a wound, the edges are simply drawn together; if a fracture of a bone, the limb is merely so laid that the broken ends of the bone shall fall into apposition—a natural process effects the cure. In medicine, many cases are in exactly the same position; small-pox, measles, scarlet fever, and some of our most virulent diseases, have a certain course to run, and the prudent physician is content with watching their progress, and using active medicines only to serve some special object which may arise in their course. The greatest reliance should be placed upon the "*vis medicatrix naturæ*," and care should always be taken not to interfere with its operations, which will be found in every way scrupulously protective, and possessed of various means for averting the fatal terminations of disease. We scarcely ever find a perforation of the intestine without a protecting process of adhesion to prevent the escape of its contents having been commenced; and we find many adhesions of the intestines formed merely to prevent perforations. So constantly is the self-restorative process always at work, both in medical and surgical cases, that the natural progress, and terminations, of all diseases should be well weighed, previous to any plan of treatment being adopted; and it should be also borne in mind, that in very many diseases where no complication exists, it will be better to do nothing; and that as much skill is required, on the part of the physician, to avoid interference, as to treat disease—a skill, which is only to be obtained, through the means of a correct knowledge of pathology, which it is the duty of every medical student to master.

Purposely, for the sake of the convenience of teaching, and studying, their characters, the various diseases have been arranged into groups, as into classes, and orders. This may have the effect of deluding the beginner into the belief that the division is natural; and I must therefore say, that it is most rare to find a patient suffering from a disease as described in books, quite uncomplicated, or to speak plainly, from one disease alone. For instance, diseases of the heart are very frequently accompanied by symptoms of disease of the brain, and also of the liver, kidneys, and lungs; and to this sufficient attention has not been paid. But in medicine founded upon physiology, its proper basis, these facts will necessarily develope themselves. It will, when taking the proper physiological view of medicine, be impossible to speak of particular diseases of the heart, without at the same time noticing the injuries which result from irregularities of the circulation; or to speak of hæmorrhages and congestions, without referring to the diseases of those organs upon which they depend. Again, in diseases of the heart and organs of circulation, the influence of diseases of the nervous system must have due consideration. Tubercular, or malignant deposit, must be known to the medical observer, not only in the place in which it may exist, but if he wishes to rank as an intelligent practitioner, he must be fully aware of the laws of its relative frequency in the various organs of the body; he must, indeed, both for the good of the patient, and for his own reputation, not only be able to detect the presence of any particular disease, but from its existence be thrown upon his guard as to the consequent disease, or morbid changes, by which his patient is threatened. He must also be aware that the diseases described under the same name in one climate, are by no means the same in another; nor are they the same at all times in the same climate. And in this way alone can you reconcile the different statements of authors relative to the same disease. There is nothing more common than to hear of a bad sort of measles, or a bad sort of scarlet fever, or that we have an epidemic of a mild sort of these diseases. And when we have an epidemic of one sort of disease, as small-pox for instance, all other diseases which occur at the same time are very apt to assimilate to it in character. In measles, for instance, the first onset of the eruption, very frequently, is much more prominent, and has a very close resemblance to small-pox, when this exists as an epidemic. I saw several cases of this kind last year, and Sydenham described these circumstances under "The Epidemic Constitution of Disease." The more we examine the laws which govern diseased action, the more clearly shall we be able to trace an intimate connection between all diseases, and to discover specialities in every ease, and that it is impossible to have one organ affected without its disorder being felt by the whole system. So that no man can be a good physician unless he be a good physiologist; nor a good physiologist unless he knows well, not only the organisation, and the various actions of the different and complicated organs of the human frame, but also the influences of the agents by which we are surrounded upon that organisation.

Air, temperature, atmospheric pressure, light, and electricity, in their various modifications, have endless influences upon us. The various deviations of the composition of air have quick effects upon our system, and these effects are very much modified by the temperature, or the hygrometric condition of the atmosphere, or its state of electricity. Then, again, the composition and the nature of our food, avail much in keeping up health, or predisposing to disease. The various labours and exertions, both corporeal and mental, have their constant influences; so that there appears to be nothing, either in, or out, of ourselves, which has not its influence, either direct or indirect, upon us, in keeping up health, or causing disease; and that being considered, I would anxiously impress upon the student in medicine, the great necessity he has for intense application, to attain such an amount of information, as to fit him for the various, and important offices, that his duties, as a medical practitioner, will render him liable to be called upon to perform; which, in order to be able to perform well, he must regard no information as useless, although apparently not bearing upon his subject.

I cannot better terminate this Address than in the words of the immortal Sydenham, taken from Dr. R. B. Latham's translations of his works for the Sydenham Society:—" Whoever takes up medicine should seriously consider the following points: Firstly, that he must one day render to the Supreme Judge an account of the lives of those sick men who have been intrusted to his care. Secondly, that such skill and science as, by the blessing of Almighty God, he has attained, are to be essentially directed towards the honour of his Maker, and the welfare of his fellow-creatures; since it is a base thing for the great gifts of Heaven to become the servants of avarice or ambition. Thirdly, he must remember that it is no mean or ignoble animal that he deals with. We may ascertain the worth of the human race, since for its sake God's only-begotten Son became Man, and thereby ennobled the nature that he took upon him. Lastly, he must remember that he himself hath no exemption from the common lot, but that he is formed by the same laws of mortality, and liable to the same ailments and afflictions with his fellows. For these and like reasons let him strive to render aid to the distressed with greater care, with the kindlier spirit, and with the stronger fellow-feeling."

I cannot conclude without, on the part of my colleagues and myself, thanking you for the great compliment paid to our school by your numerous attendance to-day; and I beg to express my deep personal obligations for the very kind attention you have given to my address.

Printed at M. Billing's Steam-Press Offices, 74, 75, and 76, Newhall Street, Birmingham.